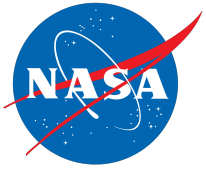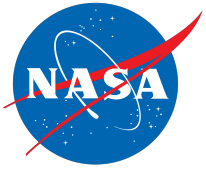# PDS4 Software Update

PDS Management Council Face-to-Face
Tucson, Arizona
April 10-11, 2014

Sean Hardman

Topics

- Overview
- Deployment Status
- Build 4b
- Special Topics
  - Issue Tracking
  - Reporting
  - Data Set Source
  - Securing PDS4 Services
- Build 5a and Beyond
- Next Steps

Overview

- Build 4a
  - Deployed to EN operations in February after ORR Board approval.
  - Node deployment underway.

- Build 4b
  - Delivered on March 31, 2014.
 - Currently undergoing integration and test.
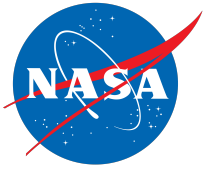
Deployment Status

- Node deployments of Build 4a started in February with Atmospheres.

- PPI, SBN, Geosciences, Rings and Imaging were invited to perform the deployment in March.

- Atmospheres and Geosciences have completed deployment of the core components.

- Some are in progress, others haven't started and a couple have yet to be asked.
 - Those who haven't started should deploy Build 4b software moving forward.
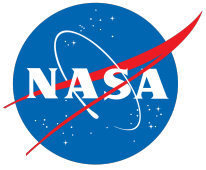
Build 4b Summary

- Modifications to keep pace with changes occurring in the PDS4 data model.

- Harvest Tool and Validate Tool were modified to provide support for xinclude statements within product labels.

- Transform Tool was modified to streamline the API for use by other services.

- Search modified to better handle PDS4 context products and the PDAP protocol.
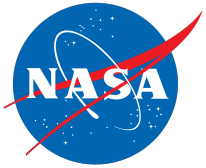
Build 4b
EN Deployment
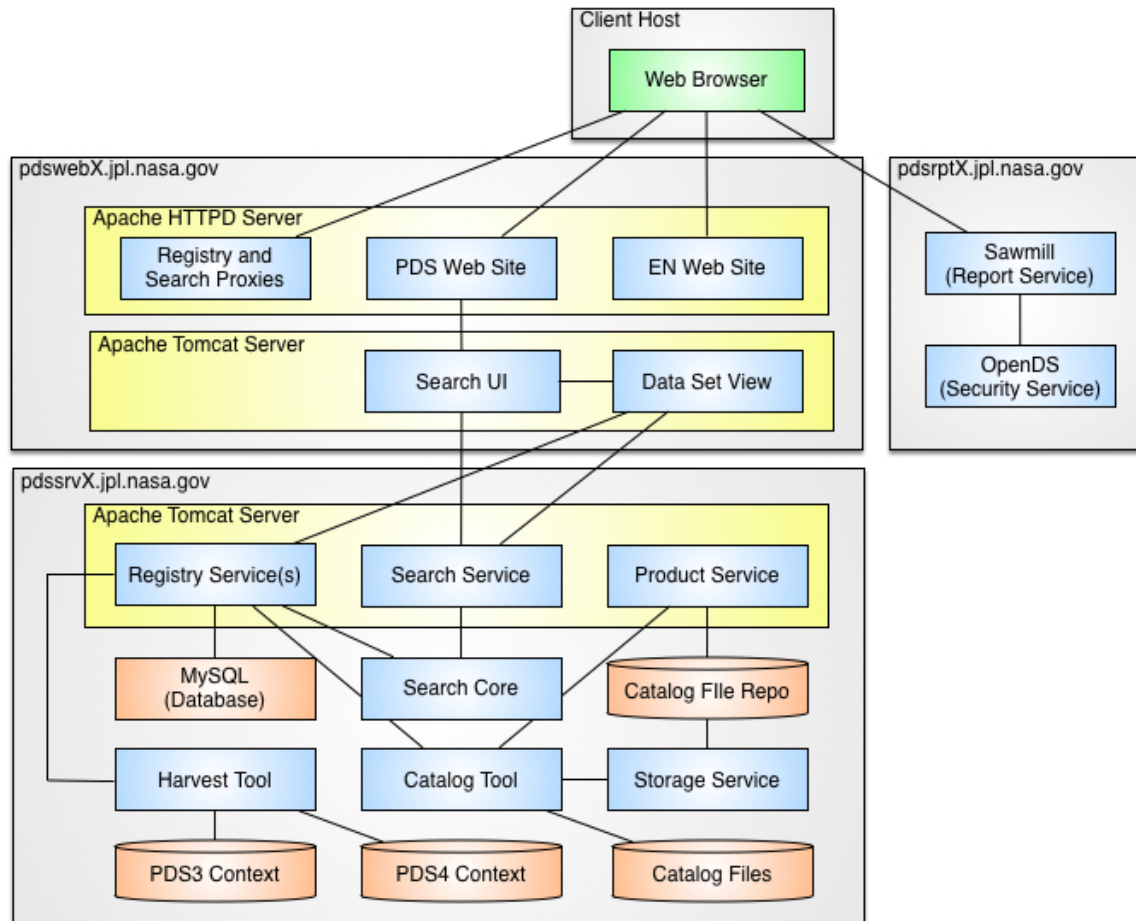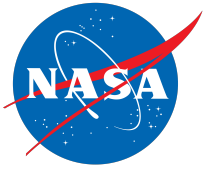
Issue Tracking

- A separate JIRA project has been created for PDS software:
  - https://pds-jira.jpl.nasa.gov/browse/SW
- This instance will track high-level issues and requests originating from outside the EN.
- EN will continue to utilize our internal instance for tracking our specific activities.
- Current RFA's need to be evaluated for possible promotion to a tracked issue.
  - I'll need about a month to get these in order.
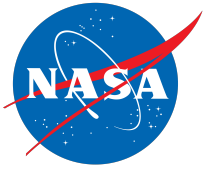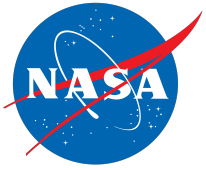
Reporting

- Sawmill software installed at the EN.
    - In the process of moving it to new hardware.
- Utilizing the service for web metric reports.
    - EN for the last two months.
    - Reports generated for IMG last month.
- Ready to start pulling and transform Node web logs for service population. Really.
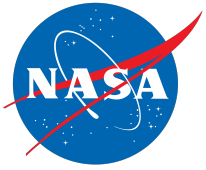
Data Set Source

- As previously mentioned, there is duplication of PDS3 Data Sets among the PDS and PSA.
  - There are 259 to be exact.
- The immediate resolution was to remove the duplicates from the PSA registry and re-index.
- Support for displaying both has been implemented.
  - Search interface offers Agency facet to filter on PDS or PSA results.
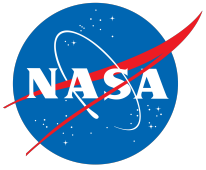 - Additional source identification in search results is under consideration.

Data Set Source cont.

Agency facet appears
if results include
PDS and PSA hits

Securing PDS4 Services

- Looking to provide a few options.

- Services can be secured within Apache Tomcat, but it does complicate the installation and operation.
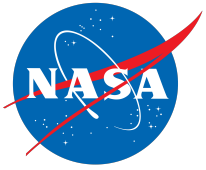
- The preferred method is to secure via reverse proxy from an Apache HTTP server.
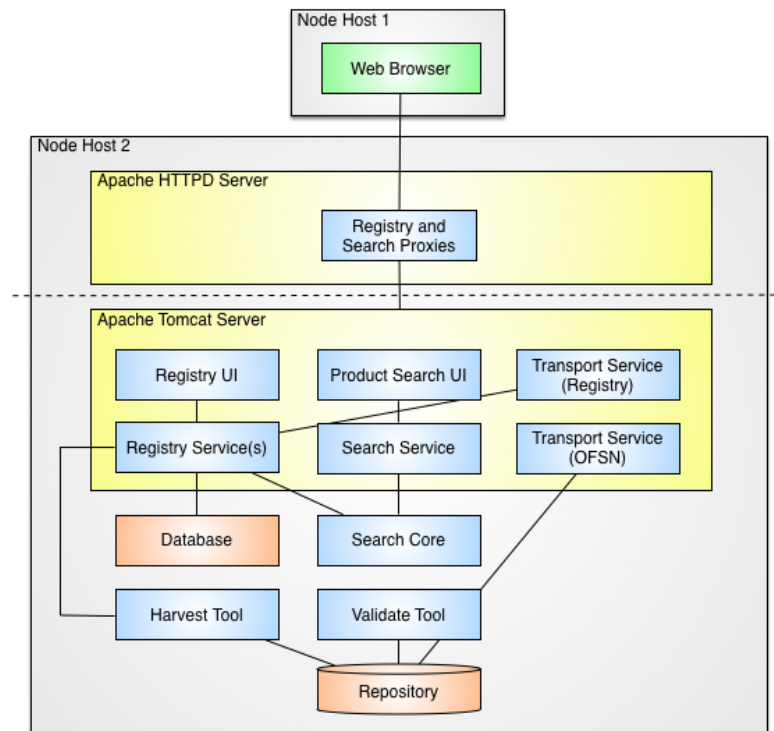
Build 5a and Beyond

- Continue to support data model changes.

- Add support for additional transformations.

- Add support for content validation.

- Add support for visualization.

- Better integrate search results with available tools and services.

- Get the Tracking Service underway.
  - This is where archive status and certification status will reside for PDS4 bundles/collections.
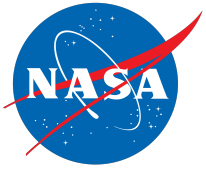
Next Steps

- Work with the Nodes on Report Service population.

- Work with the Nodes to deploy the PDS4 software locally.

  - Start registering some stuff.

- Build 5a Development

  - Focus on product-level support including content validation, search, transformation and visualization.

Questions/Comments